

SEVERE STORMS FOR JULY 1949

[The table hereunder contains such data as have been received concerning severe storms that occurred during the month]

Place	Date	Time	Width of path, yards	Loss of life	Value of property destroyed	Character of storm	Remarks
Houston, Tex.	1	4:06 p. m.			\$15,000	Wind	Southern Compress and Warehouse Company warehouse destroyed near the Turning Basin in Houston.
Galveston, Tex.	1	4:20 p. m.		2	25,000	do.	Complete loss of 45-foot cruiser valued at \$17,000; dashed against rocks. A 30-foot launch also damaged. Slight damage to other small craft. Steel supports of outdoor screen of theater at end of Pleasure Pier demolished. Man died from heart attack while trying to revive another who drowned. Wind gusts reached 75 m. p. h.
Lena, Ill.	1	4:30 p. m.			2,000	do.	Damage to corn and grain crops.
Moline, Ill.	1	7 p. m.			10,000	do.	Many trees blown down; utility services interrupted; several store-front windows smashed; 3 yachts damaged; 1 automobile destroyed.
Galesburg, Ill.	1	8:15 p. m.		1	4,000	do.	Small plane wrecked, killing pilot and seriously injuring passenger. Minor damage to crops.
Benson County, N. Dak.	1	Evening				Hail	Some crop damage.
Greenville, Madison County, Fla.	1			2	0	Electrical	2 men killed by lightning and several others shocked.
Koochiching County (north-western portion), Minn.	2	7 p. m.		0	15,000	Tornado	5 barns wrecked or damaged; communication and power lines disrupted; trees uprooted.
Wells County, N. Dak.	2	7:10 p. m.				Wind and hail	Some property and crop damage at Leeds.
International Falls and vicinity, Minn.	2	P. m.			5,000	Electrical	A barn and silo destroyed by fire, after being struck by lightning.
Tucson, Ariz.	2	Late evening				Wind	Wind blew down 5 telephone poles on Ajo road west of Tucson.
Hayden, Colo.	3	2 p. m.	600		2,000	Hail	Hailstones $\frac{1}{4}$ to 1 inch in diameter damaged crops and buildings.
Virginia and vicinity, Minn.	3	3 p. m.		5	20,000	Thundersqualls	Large roller skating rink tent blown down. Hangar at Virginia Airport unroofed and airplane damaged. City and farm buildings damaged. Many trees uprooted. Poles and wires down. 5 men drowned when their boats capsized.
Pennington and Becker Counties, Minn.	3	3:41 p. m.			33,000	Thunderstorm and hail	Hail caused considerable damage to crops and property. Much poultry perished.
Ashland and Bayfield Counties, Wis.	3	Night		1	500,000	Wind and rain	2 fishing boats in Lake Superior overturned. Telephone and power service in and near Ashland disrupted. Flash flood on Bad River inundated portions of Mellen and Odanah. Flooding water caused some damage to streets and highways in both counties. Passenger train wrecked, due to washout in Ashland County.
Flathead Valley, Mont.	4	2:30-3:30 p. m.				Wind and hail	A sudden storm raised clouds of black soil into air followed by sudden downpour of hail and rain. Wind velocity recorded at 40 m. p. h. at Kalispell Airport, with gusts of 65 m. p. h. Telephone and power lines badly damaged, cutting off communications for several hours; trees uprooted near Hungry Horse dam site.
New York City, N. Y.	4	3:10 p. m.		6		Wind	Winds, reaching speed of 50 m. p. h., struck metropolitan area, blowing down trees and power lines. Windows broken in Westchester County. Distress signals from about 300 small craft; many capsized in waters adjoining city. 6 persons drowned.
Conrad, Mont.	4	6 p. m.				Hail	Hail size of grapes damaged crops over path 3 miles long.
Minnesota, west-central and north-central counties.	5-8	A. m.			150,000	Thunderstorm	Excessively heavy rains flooded fields, lowlands, highways, roads, streets and basements. Ditches filled to overflowing. Much merchandise in basements damaged. Gardens and crops under water. Communication and power lines disrupted.
Dillon, Mont.	5	1 p. m.	1			Hail	Hailstones, $\frac{1}{4}$ to $\frac{1}{2}$ inches in diameter, caused complete loss of tarpaper roofs on 21 buildings.
Truly, Mont.	5	2-3 p. m.	1			do.	Moderate hail did some damage to wheat.
Manhattan, Mont.	5	3 p. m.				do.	Moderate hail caused 15 to 20 percent loss of fall wheat.
Choteau, Mont.	5	4 p. m.				do.	Moderate hail, some as large as marbles, damaged wheat considerably.
Reed Point, Mont.	5	4:30 p. m.	880		20,000	do.	Severe loss of wheat over path 3 miles long.
Barber, Mont.	5	Afternoon	440-880		1,200	do.	Damage to wheat.
Glenwood (near), Ala.	5	do.		2		Electrical	Farmer and son killed by bolt of lightning while seeking shelter under tree.
Challis (near), Idaho	5	do.		1		do.	A shepherd killed and 3 others injured by lightning which struck corral 35 miles from Challis.
Broadview, Mont.	5	6 p. m.	1			Hail and rain	Damaged wheat over path 20 miles long.
Fond du Lac (near), Wis.	5	P. m.			15,000	Electrical	Lightning and fire destroyed barn and contents.
Shawano (near), Wis.	5	P. m.				do.	15 cows under tree struck and killed by lightning.
Seymour (near), Wis.	5	P. m.			12,500	do.	Lightning and fire destroyed barn and contents.
Oakfield (near), Wis.	5	P. m.				do.	Lightning and fire destroyed chicken house.
Sheridan, Wyo.	5					Hail	Considerable damage to gardens.
Foxhome and vicinity, Minn.	6	A. m.			22,500	Electrical	A church struck by lightning and destroyed by fire. Barn and tree struck by lightning.
Winifred, Mont.	6	4 p. m.	1,320		1,600	Hail	Considerable damage to wheat.
Roy, Mont.	6			0		Tornado	A twister moved garage 300 feet and smashed it; also, wrecked an oil house.
Washington County, Okla.	6-7	11:15 p. m.-1:30 a. m.	1	10	16,900	Wind and rain	\$14,000 damage to crops; \$2,000 to buildings and automobiles.
Kandall, Dade County, Fla.	7	11-11:30 a. m.			500	Wind	Winds estimated at 40 to 50 m. p. h. broke power lines, uprooted trees, and blew shutters from buildings.
Wibaux, Mont.	7	1-1:30 p. m.	880		1,500	Hail	Wheat damaged over a path $2\frac{1}{2}$ miles long.
Spokane (near), Wash.	7	3 p. m.			400	Whirlwind	Suddenly developed over Loon Lake; sky nearly cloudless at the time. On beach of lake a 16-foot, 450-pound motorboat, previously drawn on shore, was suddenly lifted into air to height described by several witnesses as 100 to 200 feet. Whirlwind died out as suddenly as it began; boat dashed to pieces by fall and impact with ground. Duration of whirlwind probably not more than a minute or 2; no well-defined path. Probably an unusual "dust devil," having its inception in temperature differences between superheated ground and adjacent cool area over lake surface.
Flathead County, Mont.	7	Afternoon	1	5		Hail	Scattered hailstorms caused some damage to gardens.
Raynesford, Mont.	7	do.				do.	Moderate hail caused some damage to 25 acres of wheat.
Northampton County, N. C.	7	do.				Thunderstorm	High winds and rain caused some crop damage.
Richey, Mont.	7					Wind	Plane blown over. Small buildings demolished.
Argenta, Mont.	7					Hail	Hailstones up to $\frac{3}{4}$ inch in diameter damaged roofs on several small buildings.
Caldwell County, N. C.	7					Electrical and wind	Damage of several thousand dollars, mostly to crops in local area.
Cumberland and Dauphin Counties, Pa.	7					Electrical, wind, and rain	2 barns and contents destroyed by fire after being struck by lightning. Farmhouse struck by lightning; slight damage to roof. Trees and power lines felled locally. In Harrisburg, water pushed in about 15 feet of basement wall.
Craig County, Okla.	8	Midnight to 1 a. m.				Electrical	Damage to 70 phones and 4 long-distance lines; power lines disabled.
Fergus Falls and vicinity, Minn.	8	3 a. m.			5,000	do.	A large barn on southwestern outskirts of city entirely destroyed by fire after being struck by lightning. Some minor damage in city.

1 Miles instead of yards.

SEVERE STORMS FOR JULY 1949—Continued

Place	Date	Time	Width of path, yards	Loss of life	Value of property destroyed	Character of storm	Remarks
Dungannon (near), Scott County, Va.	8	Afternoon			\$2,000	Rain	Bridge approaches washed out on Route 66.
Berea, Ky.	8				2,000	Electrical	Lightning struck a barn, causing more than \$2,000 damages.
Fairview, Mont.	8					Wind	Trees, small buildings, and power and telephone lines damaged.
Powder River County (southeastern portion), Mont.	9	Late afternoon	1			Hail	Hailstones, ranging from small to as large as an egg, caused complete loss of crops in some sections and little in others, hitting in streaks.
Erie, Pa.	9	Evening		3		Squall	3 persons drowned and 5 rescued after 2 outboard motorboats capsized on Lake Erie.
Washington County, Mo.	10	5:15-6 a. m.	12			Rain	Area around Old Mines, about 8 miles northeast of Potosi, flooded, causing damage to some homes, business places, feed houses, livestock and crops. Some flooding also in Potosi.
Roanoke, Va.	10	5 p. m.				do.	Cellars flooded in downtown business district.
Lovelandville, Ky.	10			1		Electrical and rain	Lightning burned a barn and killed 1 person and 2 cows. Flash floods in western part of county.
Utica, Mont.	11	1:30 p. m.	880			Hail	Hailstones, ranging up to size of golf balls, caused considerable damage to wheat and oats.
Porthill, Idaho	11	4:30 p. m.	880		50,000	do.	Originated in Canada; moved southeastward over path 2 miles long in State. Damaged peas and wheat severely and fruit trees and gardens to lesser extent.
Atlanta, Ga.	11	4:30-5:45 p. m.			5,000	Rain	Very heavy rainfall flooded streets, basements, and some stores in small portion of business section. Rain choked sewers, rising in some low lying streets to height of 5 feet, causing mostly minor damages to parked automobiles. Water rose above floor levels of some stores, causing moderate to heavy damages to stock. Accumulation of water on storage garage caused roof to cave in, with resultant damages to 6 or more automobiles.
Baltimore County, Md.	12	2:30 p. m.				Rain, with flash flood.	York Road at Parkton flooded by Little Gunpowder Falls. Gardens and yards washed out. Train traffic on Pennsylvania Railroad delayed about 5 hours. Motor traffic stalled and several persons removed to safety by boat. Streets blocked off in Pikesville area because of dangerous gullies caused by heavy rains.
Stillwater County (north-central portion), Mont.	12	3 p. m.	115		3,000	Hail	Widely scattered hail caused some damage to wheat and barley.
Greeley, Colo.	12	3:40-4:05 p. m.	1,760		15,000	do.	Hailstones $\frac{3}{4}$ - $\frac{1}{2}$ inch in diameter. Principal damage to crops.
Northern Roane and southern Wirt Counties, W. Va.	12	Late afternoon and evening.				Electrical	2 children stunned when house struck by lightning. 8 men in hayfield stunned when lightning struck nearby barn.
Alva, Wyo.	12	7:30 p. m.				Wind	1 small airplane damaged. Several haystacks blown away.
Baltimore, Md.	12	9:30 p. m.				Rain	Landslide onto north-bound lane of Falls Road near Chestnut Avenue. Earth, bushes, and trees, 6 feet deep on road. North-bound traffic detoured until next morning.
Garrett, Alleghany, and Frederick Counties, Md.	12	P. m.				Rain with flooding.	Considerable damage caused by surface waters running down mountains and hills. The Monocacy River, Toms Creek, Flat Run, Bear Creek and Jackson Run overran their banks, blocking many roads and highways, and flooding homes and stores. Church at Lonaconing among structures damaged. At Western Port waters covered some streets to depth of 5 feet; 50 feet of concrete floodwall undermined along banks of Georges Creek.
Torrance County (southwestern portion), Wis.	12	P. m.			4,800	Hail and rain	Damage confined to crops.
Harlowton, Mont.	12		880			Hail	Hailstones size of marbles, caused considerable damage to wheat.
Roy, Mont.	12					do.	Complete loss of 220 acres of grain and damage to several thousand acres of range.
Washington County, Mo.	12					Rain	Main streets of Potosi flooded, damaging homes, business places and supplies stored in basements.
Sutton and Camden-on-Gauley areas, W. Va.	13	Early a. m. to 8 a. m.		1	700,000	Rains and flash floods.	Principal damage to railroad beds, highways, and bridges in head waters of Elk River and headwaters of Gawayley River areas. About 30 dwellings flooded and 5,000 acres inundated.
Gibbon, Buffalo County, Nebr.	13	1:15-2 p. m.	16		75,000	Hail	Corn and potatoes principal crops affected in path 10 miles long.
Newport News, Va.	13	2 p. m.			12,000	Wind	Filling station lost its marquee; a few roofs torn off; porches blown away; windows smashed; a frame garage demolished.
Marshall, Wyo.	13	Evening	12			Hail	Hail heavy 10 miles north of Marshall; lack of vegetation kept damage to a minimum.
Great Falls, Mont.	13		11-2		25,000	do.	75 to 90 percent loss of grain over path about 4 miles long.
Power, Mont.	13		13		15,000	do.	Hailstones, $\frac{1}{4}$ to $\frac{1}{2}$ inch in diameter, damaged wheat considerably.
Newkirk and vicinity, Wis.	14	5 p. m.			1,800	do.	Gardens total loss; many windows broken and roofs damaged.
Otis, Colo.	14	5:55 p. m.		0	5,000	Tornado	Twister of short duration struck northwest of Otis, damaging farm building. Path narrow.
Laramie County (southern portion), Wyo.	14	Afternoon	15			Hail and wind	Heavy loss to growing crops; in some places losses 100 percent.
Gainesville and vicinity, Ga.	14	Late afternoon and evening.			5,000	Rain and electrical	Very heavy rainfall, lasting 4 to 6 hours, with considerable lightning, over small area from Gainesville eastward. Most of damages due to flooding in tributary of upper Oconee River near White Sulphur Springs. 40-foot bridge washed out. Moderate to heavy damage to crops; some damage on farm, where family marooned by rapid rise of the stream. Lightning struck a radio tower and several houses, causing light damage.
Torrance County (southwestern portion), Wis.	14	9 p. m.			10,250	Hail	Light property damage; principal loss in pinto beans.
Lackawanna County, Pa.	15	3-5 p. m.				Electrical, wind and rain.	2 highway department employees injured and 2 others knocked unconscious when lightning struck near them.
Wilkes-Barre, Kingston, Ashley, and Sugar Notch areas, Pa.	15	3-5 p. m.				Thunderstorm, wind and rain.	Widespread damage when falling trees downed power lines, disrupted traffic control signals, and smashed big plate-glass windows. Power out at hospitals for 1½ hours. Some streets and railroad tracks flooded and many streets blocked for several hours by debris.
St. Louis County and City, Mo.	15	4:30 p. m.				Electrical and rain.	Storms spotty, most damage in southern and northwestern sections of city and in county. Homes, buildings, and power lines struck by lightning or damaged by rain.
Gurley (east of), Cheyenne County, Nebr.	15	5 p. m.	11½		100,000	Hail	Principal damage to wheat. Storm moved southeastward over path 6 miles long. Hailstones size of marbles.
Quay County (central portion), Wis.	15	5 p. m.			10,000	Hail and rain	Principal damage to crops, mainly truck, cotton and grain sorghums.
San Miguel County (southwestern portion), Wis.	15	7:30 p. m.			5,000	Hail	Damage confined to crops.
Perryton, Ochiltree County, Tex.	15	7:30 p. m.	11-6		250,000	do.	Principal damage to automobiles and roofs. 2 persons slightly injured.
Mountrail County, N. Dak.	15 and 19	Evening				Wind	Buildings damaged near Tagus.
Etherton, Ill.	15 and 19					Hail	400 acres of fruit, mainly peaches, badly damaged.
St. Louis County and City, Mo.	16	3:40 p. m.				Electrical and rain	Lightning struck furniture store; damage \$30,000. 4 firemen injured. Lightning also struck 14 other places. Some trees and wires downed and part of a street caved in. Hail in some areas light to total loss of grain over path about 20 miles long.
Richey, Mont.	16	5 p. m.	13			Hail	Hailstones, ranging from $\frac{1}{2}$ to 3 inches, severely damaged wheat and flax.
Dawson and Richland Counties, Mont.	16	6 p. m.	12		7,000	do.	

1 Miles instead of yards.

SEVERE STORMS FOR JULY 1949—Continued

Place	Date	Time	Width of path, yards	Loss of life	Value of property destroyed	Character of storm	Remarks
Morgan County, W. Va.	17	4:30 a. m.-7:30 p. m.	-----	-----	\$3,500	Rains, flash floods and wind.	Damage to crops about \$2,000, to buildings and other property \$1,500. Park in downtown Berkeley Springs inundated to depth of 3 feet in places.
Windom and vicinity, Minn.	17	A. m.	-----	-----	40,000	Electrical.	Grain elevator destroyed by fire, after being struck by lightning.
Port Arthur (near), Tex.	18	10 a. m.	100	0	0	Tornado.	Funnel formed just south of Neches River, and 2½ miles upstream from Orange-Port Arthur Bridge at point about 10 miles north of Port Arthur. Crossed river in northeasterly direction in path 2 miles long. Tornado formed in leading thunderhead of 3-thunderstorm formations. Funnel cloud well formed and gathered considerably debris. No structures in its path. Heavy precipitation lasted only short time.
Adams and York Counties, Pa.	18	2-4 p. m.	-----	-----	-----	Rain.	Harrisburg-Gettysburg highway flooded for several hours. Tractor-trailer jack-knifed and upset near Rosegarden; water 18 inches deep on highway there. Williams Grove, Shiremanstown, and Camp Hill sections damaged by minor local flooding.
Tomahawk (near), Wis.	18	Afternoon.	300	0	-----	Tornado.	Path from southeastern Price County east-northeastward to just northeast of Tomahawk. Most destruction just north of Tomahawk. A school and several farm buildings badly damaged and many large trees blown down. First-sized hail ruined some crops and gardens, and caused several thousand dollars damage to newly laid concrete road.
Carroll County, Md.	18	7 p. m.	-----	-----	-----	Hail, wind and rain.	Heavy hailstorm struck Hampstead. Rain, hail, and high winds in many sections of county.
Washington and Frederick Counties, Md.	18	-----	-----	-----	-----	Rain, with flash flood.	Highways blocked by water. Many farm roads on South Mountain closed for several days. Heavy losses in rural areas to livestock and poultry.
Robeson County, N. C.	18	-----	-----	-----	25,000	Electrical.	Lightning destroyed high school building.
Ledger, Mont.	19	3 p. m.	-----	-----	-----	Hail.	Considerable damage to wheat and gardens.
Toole County, Mont.	19	4 p. m.	880	-----	19,000	do.	Hailstones size of marbles, caused considerable damage to wheat and barley.
Meadville, Crawford County, Pa.	19	5-8 p. m.	-----	-----	10,000	Rain.	Flash flood resulted when 3.35 inches of rain fell in 1 hour, an all time record for Meadville. 150 houses and at least 6 business places suffered water damage in basements when Little Mill Creek went out of banks and flooded low lying streets. Telephone and power lines down.
Bottoms Bridge (near), New Kent County, Va.	19	6 p. m.	-----	-----	1,000	Wind.	Garage upended, machine shed partially unroofed, and large oak tree uprooted.
Jerseyville, Ill.	19	11 p. m.	-----	-----	5,000	Wind and rain.	Trees uprooted; telephone lines downed; many basements flooded. Some damage to corn and soybeans.
Batrick, Mont.	19	-----	-----	-----	-----	Hail.	Considerable damage to hay, grain, and pastures.
Vicksburg, Miss.	19	-----	-----	2	-----	Electrical.	2 persons killed by lightning.
Quincy, Ill.	20	3 a. m.	-----	-----	-----	Electrical and rain.	Lowlands flooded. 11,000 bales of straw destroyed by lightning.
Granite City, Ill.	20	3 a. m.	-----	-----	15,000	Electrical, rain and wind.	Trees downed; several roofs destroyed; utilities damaged; streets and basements flooded.
St. Louis County and City, Mo.	20	3:20 a. m.	-----	-----	-----	Rain, wind, and electrical.	One of heaviest July rainstorms in St. Louis history, accompanied by high winds and lightning, damaged much property and flooded thousands of basements in city and portions of county. Damage estimated at hundreds of thousands of dollars.
Nebo, Ill.	20	3:30 a. m.	-----	-----	12,000	Electrical, rain, and wind.	Barn filled with hay destroyed by lightning. Some damage to crops.
Conneautville, Crawford County, Pa.	20	11 a. m.-1 p. m.	-----	-----	-----	Rain.	Small stream overflowed, flooding basements and first floors.
Dawson County, Mont.	20	2:30 p. m.	12½	-----	15,000	Hail.	Hailstones, size of moth balls, caused considerable damage to small grain, corn, and sugarbeets.
Connecticut Valley of Massachusetts and Connecticut, eastern Massachusetts, Bennington County, Vt., and Merrimack County, N. H.	20	3-5 p. m.	-----	2	5,000,000	Electrical, hail and wind.	Hail destroyed 15,000 acres of tobacco, largely in Hampshire and Berkshire Counties. Stones as large as walnuts. Lightning damage widespread; several blackouts. 50 homes in Greater Boston area struck. Lightning fires destroyed several homes in central Massachusetts. Wind damage in many communities; trees blown onto highways.
Jeff Davis Parish, La.	20	4:30 p. m.	-----	0	50,000	Tornado.	Church, several homes and barns destroyed or badly damaged; telephone and power lines severed; trees uprooted.
Republic County (northwestern part), Kans.	20	Evening	13	-----	50,000	Wind.	High wind caused nearly a score of losses to farm buildings and crops in path 8 miles long from near Republic northeastward to State line.
Putman County, Mo.	20	do.	-----	-----	-----	Electrical.	Lightning killed 4 cows near Unionville.
Mercer, Stark, Golden Valley, McClean, McIntosh, Hettinger, Logan, Pembina, and Slope Counties, N. Dak.	20	do.	-----	-----	-----	Wind and hail.	Damage in Beulay area estimated at \$8,000 to \$8,000. Man injured when stone smokehouse blown over on him. At New England severe hailstorm occurred in strip 3 to 5 miles wide from south of Rainy Butte to north of Regent, with crop losses ranging up to 100 percent. Buildings damaged or wrecked, and power and communication lines disrupted in most of these areas. Several hailstorms during day caused considerable damage to crops.
McCone, Roosevelt, and Richland Counties, Mont.	20	-----	-----	0	500	Tornado.	Damaged 1 home, unroofed barn, and destroyed chicken brooder with 100 chickens.
Cherry Lake (10 miles north of Madison), Fla.	20	-----	-----	-----	-----	-----	Flash flood; large number of homes and automobiles damaged.
Tiskilwa, Ill.	21	6:30 a. m.	-----	-----	100,000	Rain.	Oat crop damaged.
Soles Mound, Ill.	21	2:30 p. m.	-----	-----	-----	do.	Trees blown down; utilities damaged; barn destroyed by lightning; many basements flooded.
Watseka, Ill.	21	6 p. m.	-----	-----	10,000	Electrical, rain, and wind.	Trees blown down; utilities damaged.
Logan County, Ill.	21	8 p. m.	-----	-----	2,000	do.	Some streets flooded; power services partially disrupted; motorist injured by falling tree limb.
Springfield, Ill.	21	9 p. m.	-----	-----	1,000	do.	Flooding in lower parts of city.
Danville, Ill.	21	-----	-----	-----	-----	Rain.	Over \$10,000 damage to buildings in Eddy County near McHenry, with some crop damage. Lightning struck house near Eckman, with slight damage.
Walsh, Eddy, and Bottineau Counties, N. Dak.	23-24	Night.	-----	-----	-----	Wind, hail, and electrical.	Funnel cloud observed about 15 miles northwest of Shreveport. Buildings unroofed.
Shreveport, La.	23	-----	-----	0	0	Tornado.	Garage blown off its foundation.
Broadus, Mont.	23	-----	-----	-----	-----	Wind.	County roads damaged and livestock drowned during flooding caused by local rains exceeding 3 inches.
Epsie, Mont.	23	-----	-----	-----	-----	do.	Many trees uprooted; some buildings damaged.
Forrest County, Miss.	24	All day.	-----	-----	5,000	Rain.	Considerable damage to crops.
Coleraine and vicinity, Minn.	24	P. m.	-----	-----	-----	Thundersqualls.	Man killed when struck by lightning.
St. Ignatius, Mont.	24	-----	-----	-----	-----	Hail.	Bismarck's worst hailstorm in 25 years. Hailstones up to 2½ inches in diameter, driven by strong winds. Damage in strip 5 to 10 miles wide from southwest of Mandan to McKenzie. Damage to cars and buildings alone near \$2,000,000. Damage to crops not estimated, although many were 100 percent loss. Practically all windows broken in 1 greenhouse. Almost every house in northern part of Bismarck had windows broken and paint chipped on north sides. Many roofs badly damaged. Some buildings damaged in Napoleon.
Menasha (near), Wis.	25	P. m.	-----	-----	-----	Electrical.	
Burleigh and Logan Counties, N. Dak.	26	5 p. m.	-----	-----	-----	Wind and hail.	

1 Miles instead of yards.

SEVERE STORMS FOR JULY 1949—Continued

Place	Date	Time	Width of path, yards	Loss of life	Value of property destroyed	Character of storm	Remarks
Minnesota, extreme south-eastern counties.	26-27	P. m. and a. m.		1	\$160,000	Thunderstorm.	Excessively heavy rains flooded fields, lowlands, highways, roads, streets and basements. Railroad tracks washed out; much soil erosion. Communication and power services disrupted. Traffic delayed; many accidents. Creosote-block pavements buckled. Some washing, drowning, and lodging of crops. Small boy drowned.
Judith Gap, Mont.	27	2:30-3:30 p. m.	1,320			Hail.	Medium-size hailstones caused spotted damage to wheat and hay over path 20 miles long.
Gallatin County, Mont.	27	3:30 p. m.	12		5,000	do.	Hail caused 10 percent loss to wheat and barley over path 3 miles long.
Carter, Mont.	27	4 p. m.	110			Hail and wind.	Moderate hail accompanied by high wind caused total loss to crops in spots over path 25 miles long. Shingles loosened from buildings.
Molt, Mont.	27	4 p. m.	14		50,000	Hail.	Hailstones, some as large as golf balls, severely damaged wheat.
Stillwater County, Mont.	27	5 p. m.	112		500,000	do.	Hail severely damaged winter wheat, hay, and gardens over path 25 miles long. Some poultry and small pigs killed.
South Dakota, north-central area.	27	Afternoon.				Hail and wind.	Front passage caused high winds and hail as it moved eastward.
Clearwater Lake, Oneida County, Wis.	27	Afternoon.		0		Tornado.	Completely demolished a 4-room house and cut swath through woods.
Yellowstone County, Mont.	27	Late afternoon.				Hail.	Hailstones, up to size of golf balls, did considerable damage to beans and small grain.
Big Horn County, Mont.	27	7:30 p. m.	140		808,000	Hail and wind.	A severe hailstorm caused from 10 percent to total loss of wheat. Beans, sugarbeets, hay, and gardens also damaged. Hail caused \$500,000 loss to crops and \$5,000 to buildings. Wind caused \$300,000 damage to crops and \$3,000 to buildings.
Milwaukee County, Wis.	27	8-12 p. m.		3		Wind, rain, and flooding.	Wind and excessive rainfall caused considerable property damage. 3 persons killed when they came in contact with fallen "live" wire. Storm sewers inadequate to carry off water; consequently many basements and streets flooded. Riverside pumping station in Milwaukee partly flooded and operation temporarily suspended.
Arcadia, Wis.	27	P. m.				Rain and flooding.	1,800 telephones out of order because of wet cables. Part of city flooded because of excessive rains and flash flood on Turton's Creek.
Hettinger, southwestern Emmons, Cass, and Griggs Counties, N. Dak.	27	Evening.				Wind, hail, and rain.	Considerable damage in Mott, New England, and Fargo areas. Over 5 inches of rain near Litchville washed out road and railroad culverts, disrupting Northern Pacific branch line service. Torrential rains in scattered areas in Emmons County and other spots in southwestern part of State. Buildings damaged; swathed grain blown about badly.
Jefferson County, Mont.	27					Hail.	Some damage to wheat and barley.
Powder River County, Mont.	27		112		850,000	Hail and wind.	Hailstones from 1/4 to 3/4 inch in diameter caused severe damage to wheat oats, barley, and alfalfa. Sheds blown down and roofs blown off. Hail caused \$400,000 damage to crops and wind caused damage of \$50,000 to buildings, and \$400,000 to crops.
Rutherford (near), N. J.	27			1		Thunderstorm.	At Hasbrouck Heights about 2 miles north-northeast of Rutherford, storm of cloudburst nature occurred. Woman swept from her feet while crossing street as sudden flash flood washed her into deeper water where she was pinioned under debris and drowned.
Coos County, N. H., Vermont, and western and southern Connecticut.	27-28	Afternoon.				Thundershowers, wind, and rain.	Thunderstorm winds of "hurricane velocity" at North Stratford, N. H., and Searsburg, Vt., unroofed barns and houses, flattened crops and large trees.
Brainerd and vicinity, Minn.	28	2:30 a. m.			10,000	Thundersqualls.	Many lake cottages and cabins damaged; boats torn from their moorings and piled on shore; poles and wires down; farm buildings demolished or damaged; many trees uprooted.
Long Prairie and vicinity, Minn.	28	A. m.			2,000	Electrical.	7 cows killed by lightning. Communication and power services disrupted.
Dickey and Lamoure Counties, N. Dak.	28	Evening.				Wind.	Many barns and buildings wrecked or damaged. One of worst storms in that area.
Rutherford, N. J.	28					Electrical and hail.	Hailstones an inch to 1 1/4 inches in diameter fell for 15 minutes and covered ground. Many homes struck by lightning, but no serious property damage.
Moline, Ill.	29	1 p. m.			5,000	Electrical and rain.	3 homes damaged by lightning. A few streets flooded. Power services partially disrupted.
Kalispell, Mont.	29	3:20 p. m.			3,000	Electrical.	Lightning struck chimney of Kalispell High School building and split it to roofline. Bricks blown through roof of building in several places.
Cooper County, Mo.	29	3:40 p. m.	15			Electrical and rain.	Lightning struck filter house of Boonville city water plant, also, a telephone pole in city, setting it afire.
Southern Weston and northern Niobrara Counties, Wyo.	29	4 p. m.				Hail.	Heavy damage to gardens and growing crops. Some damage to roofs.
Agate (near) Sioux County, Nebr.	29	6 p. m.	15-10		25,000	do.	Wheat, corn, sugarbeets, beans, and potatoes damaged. Storm began near Lusk, Wyo., and moved southeastward in path 70 miles long.
St. Louis County and City, Mo.	29	8:30 p. m.				Wind and thunderstorm.	Most of damage due to wind blowing down wires, trees and limbs, and breaking windows. Electric power off temporarily in several thousand homes.
Baltimore County, Md.	29	P. m.		1		Electrical.	Man struck and killed while swimming in Middle River.
Bay St. Louis, Miss.	30	2 p. m.			25,000	do.	Bridge across Bay St. Louis damaged by burning when a telephone pole struck by lightning was set afire; about 17 spans charred; traffic re-routed at increased cost, busses having to travel several hundred miles out of way.
Capulla and vicinity, Wis.	30	2:30 p. m.			2,200	Hail.	Damage to crops and roofs.
Rutherford and vicinity, N. J.	30	8:55-9:16 p. m.				Thunderstorm and wind.	Several towns without electric power; a section about 1/2 mile square on west side of Rutherford hardest hit. Wind reached velocity of 80 m. p. h. About 200 trees either blown down or damaged; a larger number than was damaged during hurricane of September, 1944. Damage to trees, power lines and communication estimated at several thousand dollars.
Harford and northern Baltimore Counties, Md.	30	P. m.				Electrical and wind.	Trees felled by wind and lightning. Roads blocked by high waters and fallen trees. Power off in some sections; over 1,000 telephones out of order. 16 cows killed.

1 Miles instead of yards.

SEVERE STORMS FOR JULY 1949—Continued

Place	Date	Time	Width of path, yards	Loss of life	Value of property destroyed	Character of storm	Remarks
Forder (near), Colo.....	30	P. m.....	¹ 12	-----	\$75,000	Wind, hail, and electrical.	Storm path 30 miles long, extending southward from 20 miles west of Forder to near the Arkansas River. Lightning killed 15 cows. Hail killed many chickens and ruined many crops. Some hail stones measured nearly 10 inches in circumference. 2 windmills blown down.
Central Ariz.....	30	Evening.....	-----	1	-----	Thunderstorm, wind, and rain.	A car washed off highway in flash flood west of Casa Grande; passenger disappeared and presumed drowned. A plane wrecked and pilot injured by high wind at airport near Casa Grande. In Globe-Miami area power and telephone poles felled. Stores in Globe flooded. Roof of warehouse in Miami caved in. Several tons of muck removed from streets after storm.
South Carolina, central and northern portions.	30-31	Afternoon to morning.	-----	1	3,000	Electrical.....	Series of thunderstorms. Severe lightning caused 1 fatality, several small fires, and death of 4 valuable cows.
Baker, Okaloosa County, Fla.	31	3 p. m.....	-----	3	-----	do.....	Lightning struck baseball diamond killing 2 players instantly and fatally injuring another. Another player hospitalized for shock and burns and some 50 spectators and players treated for shock and minor burns.
Bainbridge, Ga.....	31	5:30-6:30 p. m....	-----	-----	1,000	Wind.....	Moderate damages to 2 homes and a mill. Small garage and part of a business concern unroofed.
Burleigh, McClean, and Stutsman Counties, N. Dak.	31	Afternoon.....	-----	-----	7,000	do.....	Sudden windstorm in connection with a cold front hit Bismarck, with gusts up to 70 m. p. h. which blew down or damaged a large number of farm buildings. Dairy barn at State penitentiary unroofed, with damage estimated at \$7,000. Some swathed grain blown about. Power service in Bismarck disrupted in part of city for 4 hours. Several farm buildings destroyed and considerable swathed grain blown away in area near Garrison, about an hour before storm hit Bismarck. Very high wind and rain at Jamestown in late afternoon.
Dixon County (northeast portion), Nebr.	31	8 p. m.....	¹ 5	-----	-----	Hail and wind.....	Corn and small grains damaged. Wind broke trees, upset threshing machines, hay racks, and a number of small buildings in path 10 miles long. Damage considerable.
Western Hennepin, Todd, and Stearns Counties, Minn.	31	P. m.....	-----	-----	59,500	Thunderstorm and hail.	Hail caused considerable damage to growing crops and property. Some poultry and livestock perished.
Beresford and Elk Point, Union County, S. Dak.	31	Evening.....	-----	0	1,000,000	Tornadoes.....	Series of short-lived funnel-shaped clouds formed as front passed.
Newmans Lake (near Gainesville), Fla.	31	-----	-----	1	-----	Squall.....	Woman drowned when small boat capsized.

¹ Miles instead of yards.

LATE STORM REPORTS FOR JUNE, 1949

Place	Date	Time	Width of path, yards	Loss of life	Value of property destroyed	Character of storm	Remarks
Salt Lake City and Ogden areas, Utah.	3	5-10 p. m.....	¹ 14-3	-----	-----	Wind.....	Many old or weak-rooted trees blown down. Most buildings showing appreciable damage were of low-standard construction with sheet-iron roofs. Fruit trees damaged in some sections; loss of green fruit not excessive. Sign boards blown down in both cities. Wind speeds at Ogden averaged around 50 m. p. h. during night with peak gusts from northeast of 79 m. p. h. at 10:03 p. m.; at Salt Lake City Airport Station, 49 m. p. h. at 7:30 p. m.; at University of Utah highest, 60 m. p. h. at 8:04 p. m. and 11:37 p. m.
Northern Mille Lacs County, Minn.	30	2 p. m.....	¹ 7	-----	\$15,000	Thundersqualls and hail.	A barn demolished and 2 other barns blown off foundations; wires down; farm machinery wrecked or damaged; 4 silos destroyed; many trees uprooted or branches broken off; 1 calf killed. Hail caused \$5,000 damage to growing crops, included in total.

¹ Miles instead of yards.